Borough of Ryde.

TWENTY-NINTH ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

To the Mayor, Aldermen and Burgesses, acting by the Council as the Urban Sanitary Authority.

SUDBURY, RYDE,

14th February, 1910.

GENTLEMEN,

I have the honour to present to you my Annual Report on the sanitary condition of the Borough, and the work done during the year 1909.

The notifications of infectious diseases during the year have been 49 as against 74 in 1908 and 62 in 1907.

Of these 23 were cases of diphtheria as against 24 in 1908 and 55 in 1907.

The distribution of these cases through the year was as follows:—

January	1	July	1
February	3	August	3
March	1	September	0
April	5	October	1
May	7	November	0
June	0	December	1

It will thus be seen that three quarters of the cases occurred in the first half year and that only two cases have been reported in the last four months, which are generally the most propitious for that disease. In some measure at least, I believe that this result is due to the measures which I have adopted this year to prevent infection. In all cases of diphtheria I have insisted upon isolation until a swab taken from the throat has proved negative to bacteriological examination.

The results of these examinations show clearly how impossible it is to assure oneself of a patients freedom from infection by prescribing any stated period of isolation.

2	were free	from	infection in	3 weeks.
4	,,	,,	4	,,
3	,,	,,	5	,,
3	,,	,,	7	,,
4	,,	,,	8	,,
2	,,	,,	10	,,

When it is added that the old custom was to allow the patients to mix with other children after three weeks; it is evident that the spread of infection must now have been greatly restricted.

In the last two months of the year there have been several cases of diphtheria among children attending the Bettesworth Road school, but for the most part residing outside the Borough. It was obvious that unless the same precautions were taken with regard to these children, ones efforts within the Borough might be rendered nugatory. I applied therefore to the Medical Officer of the Rural Dietrict Council to know whether he would take swabs of these children at his councils expense. He replied that the Rural District Council would not at present sanction the taking of diphtheria swabs. I therefore applied in my capacity of School Medical Officer to the Education Committee; who at once accorded me permission to take such swabs as might be necessary at their expense; and I have done so in several cases; both of known sufferers from diphtheria and of children suffering from suspicious throats.

When the first of these Bettesworth Road cases occurred, I followed up all the absentees who were in any way suspicious and in that way fell at once on the one case which occurred in the Borough in October.

About the same time in the course of my regular school inspection I found a child suffering from an acrid discharge from the nose. There had been no sore throat; but in view of the existence of a case of diphtheria in the class, I took a swab from this child's nose and it was found to be teeming with the diphtheria bacillus. This was on November 6th. I have since taken several swabs from this child's nose, and even on February 2nd 13 weeks later there were still some bacilli present. There is no evidence how long the child had been attending school with this infectious nasal discharge; but I have little doubt that in it we have the source of the other cases in the school.

In all about 46 swabs have been taken during the year at a cost of about £10 and I believe that the result has been a marked check to the spread of the disease; which had been prevailing more or less for three or four years.

There is some evidence of a local spread of infection in the neighbourhood of the lower end of Nelson Street and the adjoining part of Castle Street.

1. April 1st a case occurred in a court off George Street and close to the back of the houses at the bottom of Nelson Street (removed to Hospital).
2. April 27th a case at the bottom of Nelson Street (rapidly fatal—visitor).
3. August 13th a case in Castle Street opposite the last (removed to Hospital).
4. August 27th a case in Castle Street (Marine Terrace) (removed to Hospital—fatal).

A larger series of cases was associated with the National Schools.

1.	11/1/09.	Boy who attended National Schools till Xmas.		
2.	23/2/09.	Two boys attending National boys.		
3.	20/3/09.	Girl attending National girls.		
4.	4/4/09.	,,	,,	,,
5.	25/4/09.	,,	,,	,,
6.	6/5/09.	,,	,,	,,
7.	13/5/09.	Teacher	,,	,,
8.	20/5/09.	Girl	,,	,,
9.	20/5/09.	,,	,,	,,

Nos. 2, 4, 5, 6 and 8 were all children living in Arthur Street. Since cases may hence have been to some extent due to home infection; but I have no doubt that on the whole the infection was transmitted from one to another by unobserved carriers of infection at the schools.

The only way to prevent such spread would be to take swabs of all children showing any signs of sore throat or nasal catarrh, or even of all the children in the class: and isolate all in whom the bacillus is found. Where there a mmnicipal laboratory this is done as a mater of course; but when each swab costs 5/- the expense involved might be very heavy. At present I have restricted myself to taking swabs in cases which are manifestly suspicions.

Twelve cases were removed to the Borough Isolation Hospital, two of which proved fatal. One other fatal case occurred—that of a visitor.

Of scarlet fever we have had 23 cases.

January	4	July	0
February	4	Augnst	2
March	3	September	4
April	4	October	0
May	1	November	0
June	1	December	0

No special remarks are necessary abont these cases; except that, as far as possible I have avoided taking them into the Borough Hospital as I have been advising in all cases the treatment by inunction of eucalyptus oil supplied at the Borough's cost.

This treatment has been recommended lately as an excellent preventive of infection; and, as far as my limited experience goes, it is in favour of the claim; for there has been no case of infection from a patient who has been treated in this way.

Seven cases were removed to Hospital and the remaining sixteen were nursed at home.

The remaining notifications were two of typhoid fever; one of which was ascribed to eating oysters and the other was possibly due to the consumption of ice cream purchased from an itinerant vendor on a Bank Holiday.

Finally there was one case of erysipelas.

In all nineteen patients were treated at the Isolation Hospital during the year. In all infectious cases—in forty-five instances in all—the premises have been disinfected with the Lingner's Formaldehyde spray apparatus immediately after the recovery of the patient or his removal to Hospital.

It has been felt for some time that the system of nursing at the Isolation Hospital has left a great deal to be desired; and the Sanitary Committee has recently decided to make a change in it.

The caretaker nurse who has been there for a great number of years has now left and the committee appointed a man and wife as caretaker and nurse. The couple appointed appeared satisfactory in all respects; but unfortunately shortly before they were to have commenced their duties, the man contracted diphtheria and died; so that the committee are obliged to advertise again and have not yet been able to make a fresh appointment.

The woman appointed will be a trained nurse and her husband will assist in the care of the Hospital and will attend to the disinfector when it is installed, and to the removal of patients.

In regard to the last item it is most desirable that the town should acquire a suitable vehicle for the purpose. At present the patients are removed to the hospital in a hired cab—an old one which is used for no other purpose—but it would be only right that the vehicle used should belong to the Borough, it should be kept on the Corporation's own premises and be accessible only to their officials It is of course most desirable that it should be a proper ambulance.

I must once more call attention to the urgent need for a steam disinfector, a desideratium which I hoped last year was near achievement, but which does not appear to have come any nearer.

Tuberculosis. The only cases of tuberculosis notified to the Medical Offier of Health are those which come under the Poor Law Medical Officer.

In such cases a visit is made and directions given for the avoidance of infection. In two cases rooms and bedding have been disinfected after deaths from phthisis. There is no special accommodation for cases of pulmonary tuberculosis within the district.

The Sanitary work done during the year.

No. of nuisances reported	164
Abated without formal notice	164
No. of notices served	0
Cisterns supplied to W.C.'s	7
New pans provided	12
House drains ventilated	3
House drains disconnected from sewer	2
Yard gullies in lieu of bell traps	15
Summonses for non-compliance	0

The smoke test bas been applied to several house drains; only one defect found which was immediately remedied.

Several old brick and stone drains have been found and removed and glazed socket pipes substituted.

Systematic inspections have been made and have revealed in several instances dirty and ill kept water closets; and in one or two cases flushing cisterns out of order. There defects have been remedied on representation made to landlords. In matters of this kind the tenants do not seem to realise that if the landlord will not attend to the defect their duty is to lay a complaint at the Town Hall.

Schools have been regularly inspected. I have not found it necessary to close any school on account of infectious disease. The National Schools were disinfected in May on account of the cases of diphtheria mentioned above. For further details with regard to schools see my report as School Medical Officer.

Common Lodging Houses. There are none in the Borough.

Sewers and Drains. The sewers have been regularly flushed and the manholes disinfected. During the year two new high ventilators have been added; one of these will, I hope, prevent the odours arising from the open manhole at the head of the Pellhurst Road sewer, which have been the subject of complaint. As the result of unusually heavy rain on two occasions there has been flooding of the basements of houses in the lower part of the town. This is mainly due to the large quantity of storm water filling the sewers and being unable to discharge itself owing to the rising tide. To some extent too it may be due to rising of subsoil water, the basements being below high water mark. In so far as it is a reflux from the sewers it could be obviated to a great extent by the use of a ball valve in each house drain or by building pits round each yard gully; but it would be more satisfactory and effective if some method could be adopted of carrying off the storm water.

Scavenging and the Removal of House Refuse has been carried out satisfactorily by the corporation. A weekly removal of such refuse in summer months is in many cases insufficient; and I would again call attention to the unsightliness and insalubrity of "tipping" refuse in the neighbourhood of the town and the desirability of a refuse destructor.

Removal of Seaweed from the Foreshore has been carried out as far as possible by the Corporation, a very large quantity being so removed. In addition to this 117 loads have been removed by private persons free of cost.

Dairies, Cowsheds, and Milk Shops have been regularly inspected and are well and cleanly kept. The milk supply of the district is almost entirely derived from the farms in the country around and the milk is almost universally of high quality. There are no entirely stall fed

cows in the Borough; all of them being turned out to grass during the greater part of the year. No action has been taken with regard to tuberculous cows.

Slaughterhouses and Piggeries are regularly inspected and well kept. A complaint was received of a pigstye in Milligan Road just at the prescribed distance of 50 feet from a dwelling house. The owner was spoken to and caused it to be removed and the keeping of pigs there has been discontinued. No carcases or parts of carcases have been condemned for tuberculosis. The slaughterhouses are inspected during slaughtering by the Sanitary inspector. This official has not a special certificate in meat inspection.

Rag and Bone Shops. There are two in the Borough, which have not, as far as I am aware, given rise to any nuisance.

Water Supply. The rainfall having been abundant the Water Supply has not given cause for complaint during the year. At the same time measures are being taken to guarantee the consumers against the shortage with which we have had to contend during the recent dry seasons. A well is being sunk above the ponds at Knighton into the deep chalk, which will be 150 feet deep. From the bottom of this an adit will be cut in a northward direction as far, if necessary, as the limits of our property. At the same time a second adit will be made about 40 feet below the surface to conduct the water direct to the pumping station, whence it will be pumped up to the covered reservoirs at Ashey. The water will therefore not be exposed to the open air till it has been delivered to the consumer.

The latest Analysis received from Mr. Hehner, the Borough Analyst, is as follows:—

Report on a Sample of Water received on January 11th, 1910 from J. T. Harvey on behalf of the Ryde Corporation Waterworks.

The Sample showed in a 2ft. Stratum a very faint greenish colour. It contained a little flocculent sediment consisting of vegetable fibres incrusted with iron-oxide.

The composition expressed in parts per 100,000 was found to be as under:—

Chlorine	2·95
Sulphuric Acid	1·20
Nitric Acid	1·28
Phosphoric Acid	None
Free Ammonia	0·0023
Albuminoid Ammonia	0·0048
Oxygen absorbed from permanganate at 80F in 15 min.	0·0160

Ditto in 4 hours	0·0280
Total Solids dried at 212 F	29·68
Loss on Ignition	3.20
Appearance of Solids on heating	Slight Char.
Permanent hardness	4·8
Temporary ,,	16·3
Total ,,	21·1

Bacterioscopic Results:—

Total number of organisms per cubic centimetre	16.
Capable of growing at Blood Heat on agar	2.
B.Coli detectable in 10 c.c. not in less	

The results both chemical and bacterioscopic are quite satisfactory, and show that the supply is unpolluted and perfectly fit and safe for Public use.

OTTO HEHNER.

Total amount of water supplied:—

From Ashey Well Upper Chalk 26,769,000 gallons.
From Knighton Lower Chalk 107,286,800 gallons.
From Knighton Lower Greensand 70,909,700 gallons.
Total 204,965,500 gallons.

Amount supplied to outside district 22,615,500 gallons.

Factories and Workshops. There are no Factories in the Borough. There are 72 Workshops on the Register including bakehouses and cabinet makers. They are regularly inspected and are found to be kept in a satisfactory way in accordance with the Act.

Public Bathing Stage has been used by 5174 bathers.

Analysis of Food and Drugs.

Milk, 12 specimens, (February, March, August, September.)
Coffee, 6 specimens, (April, May).
Pickles, 3 specimens, (June).
Butter, 3 specimens, (August).
Powdered Liquorice, 3 specimens, (October).
Olive Oil, 3 specimens, (November).
30 samples in all.

None of these were found on analysis to be otherwise than in compliance with the Food and Drugs Act.

Meteorological Summary. The following summary has been supplied by the courtesy of Mr. T. Cole Flower.

Results of observations of the barometer, thermometers, and of the humidity and rainfall at Ryde in 1909. The mean monthly readings and the rainfall are given in the following table :—

	Barometer.	Thermometers.			Humidity.	Rainfall.
		Mean Max.	Mean Min.	Mean Temp.		
January ...	30·2	44·9	38·7	41·8	83	1·34157
February...	30·146	43·6	36·5	40·	78	·3198
March	29·522	44·4	37·8	41·1	82	4·59819
April	30·015	56·	45·6	50·8	73	1·34241
May	30·106	61·	49·9	55·5	78	1·48221
June	29·998	61·9	52·9	57·4	66	3·51191
July	29·974	67·7	57·8	62·7	73	2·35544
August.....	30·109	71·1	60·2	65·7	73	2·51056
September..	30·024	62·3	54·7	59·	81	4·17419
October ...	29·82	58·4	52·	55·2	85	9·38764
November ..	30·052	48·6	41·1	44·5	84	1·24666
December...	29·698	46·1	39·	42·5	88	5·72
Mean reading for Year.	29·97	55·5	47·2	51·3	78·6	37·99058

Barometer—The mean reading for the year was 29·97. The highest reading was 30·176 on January 4th ; the lowest 28·738, December 4th.

Thermometers—The highest reading was 81 degrees, August 14th ; lowest reading was 27 degrees, March 3rd. The mean reading of the maximum thermometer was 55·5 degress ; that of the minimum 47·2. The mean temperature was 51·3 degrees, and the mean daily range was 8·3 degrees.

The mean humidity 78·6.

Rainfall—October was the month during which most rain fell, viz., 9·38764 inches ; the driest month being February, with ·3198 of an inch.

The heaviest fall in 24 hours was 1·73499 on October 27th.

Total rainfall for the year, 37·99058 inches, being 6·75 inches above the average.

Rain to the amount of ·01 and over was registered on 142 days.

Total sunshine registered 1937 hours.

T. C. FLOWER.

Vital Statistics. Births Registered 192 against 168 in 1908 and 176 in 1907, 93 boys and 99 girls, 5 boys and 1 girl illegitimate. Birth rate 17·38 per 1000 against 15·21 in 1908 and 15·93 in 1907 and an average of 16·66 in the last ten years.

Infant Mortality—(deaths of children under one year) 11, or 57·81 per thousand births registered or 1 per 1000 of population. This is the lowest infant mortality for over ten years and is the more remarkable as two of the children formed part of a triplet which was prematurely born and three others were also premature children who survived their birth only half-an-hour, 6 hours and ten hours respectively. Six deaths of infants only are therefore to be ascribed to diseased conditions.

Deaths Registered 165 as against 186 in 1908 and 192 in 1907. From these must be deducted 30 deaths of non-residents in the Royal Isle of Wight County Hospital leaving 135 or a death rate of 12·2 per 1000.

To these however must be added 20 deaths of "residents" in the Isle of Wight Union Workhouse and the Isle of Wight County Asylum, bringing the total up to 155 or a death rate of 14·03 per 1000 as against 15·48 last year and an average of 15·72 for the past ten years.

Deaths of residents registered at all ages—

Under 1 year (including 1 in workhouse)	12
1 year and under 5	3
5 years and under 15 years	8
15 years and under 25 years	3
25 years and under 65 years	60
Over 65 years	69
	155

Deaths of residents from the following specified causes—

Diphtheria	3
Diarrhœa...	2
Puerperal Fever...	1
Phthisis	7
Other tuberculous diseases	9
Cancer	13
Bronchitis	9
Pneumonia	4
Heart Disease	19
Accident	3
Suicide	2

I am, Gentlemen,

Your obedient Servant,

PHILIP D. TURNER.

Borough of Ryde.

TWENTY-NINTH

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE

BOROUGH OF RYDE,

For the Year 1909.

C. R. Moody & Co., Printers, 12 John Street, Ryde.